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# FOREIGN AGRICULTURE

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fish mixed feed plant

## Brazil and Malaysia Gain More Oil, Meal Markets

Foreign  
Agricultural  
Service  
U. S. DEPARTMENT  
OF AGRICULTURE



## FOREIGN AGRICULTURE

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### In this Issue:

- 2 Brazil, Malaysia Set To Gain More of Oil and Meal Markets  
By Alan E. Holz
- 5 Improving World Economy May Boost U.S. Farm Exports  
By O. Halbert Goolsby
- 6 USSR Buys U.S. Soybeans
- 7 Why Use Plagues World Dairy Industry  
By David R. Strobel
- 9 Coffee Output in 1976/77 Forecast Down 16 Percent  
By J. Phillip Rourke
- 11 Spain's Farm Imports Up Despite Rise in Production  
By James Lopes

### This week's cover:

Workers in mixed feed plant near Madrid, Spain, bag feed for shipment to poultry and livestock farms in the area. Much of Spain's imports are feedgrains and soybeans from the United States utilized in mixed feed for its expanding livestock sector. See article on page 11.

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# Brazil, Malaysia Set To Gain More of Oil and Meal Market

By ALAN E. HOLZ

*Foreign Commodity Analysis, Oilseeds and Products  
Foreign Agricultural Service*

**B**RAZIL and Malaysia, the stiffest U.S. contenders in the world meal and oil markets today, promise still stronger competition during the next few years as a result of their almost built-in production momentum and limited domestic-demand potential. And with production growth continuing, some major shifts in world oil and meal trade appear probable, including accelerated foreign competition that could further reduce the U.S. share in world markets.

The products in question are Brazilian soybeans and Malaysian palm oil, both of which have experienced rapid and uninterrupted production growth for nearly a decade.

In Brazil, the expansion has carried soybean output from slightly over 1 million metric tons in 1969 to an estimated 11.6 million for the 1976 crop just harvested. It also has pushed exports of both soybeans and soybean meal up nearly 11-fold between the 1969/70 and 1975/76 crop years (beginning April 1), to 3.52 million and 3.54 million tons, respectively, while lifting soybean oil exports from nothing to 320,000 tons.

Malaysia likewise has charted an expansionary course for its palm oil industry, boosting oil palm area from less than 208,000 acres in 1965 a decade ago to 1.24 million in 1975. Steadily increasing production from new trees coming into bearing—plus yield improvement and further acreage expansion—will push Malaysian palm oil more and more into the forefront in coming years.

Already, the country's oil-production and export record is impressive. From only 149,000 tons in 1965, palm production surged to 1.14 million tons by 1975, while exports jumped from 141,000 tons to 1.13 million.

This is the second of two articles on the world oil and meal situation. The first, in the July 19, issue, took a look at production and trade prospects for 1977.

A look at what the immediate and near-term future holds for the two products follows:

**Brazilian soybeans.** Until the recent uptrend in prices of soybeans and meal, there appeared to be some question about the prospects for further rapid growth in Brazilian soybean production. The price rebound, however, changed the short-term picture, while the nature of Brazilian soybean production itself points to sustained long-term expansion.

For instance, while plantings on newly cultivated land have accounted for much of the recent growth, Brazil has also made sizable strides by double-cropping soybeans following wheat. This factor will continue to stimulate Brazilian soybean output for the next few years.

Gains in Brazilian soybean output also reflect a significant uptrend in yields, plus some shift away from other crops. Last year's frost damage to Brazil's coffee crop accelerated that shift, contributing to the 1976 crop's 20-percent gain over the 9.7-million-ton harvest of 1975.

Having just harvested this record crop of 11.6 million tons, Brazil is speeding up exports of beans and products. The expected trade result for 1976: Exports of 4.2 million tons of soybeans, or 19 percent more than in 1975; 4.1 million of soybean meal (up 16 percent), and 420,000 of soybean oil (up 31 percent).

Except during periods of depressed prices, Brazil's soybean policy seems to be to move as much and as fast as possible in order to prop up the nation's weak foreign exchange position. Yet devaluation of the cruzeiro in response to this weak exchange position has strengthened the country's soybean exports.

The only area not keeping pace with the industry's growth is domestic demand for soybean oil and meal. Exports, consequently, are accounting for



more and more of the total supply. This season, exports will take about 86 percent of the net available supply of soybeans (protein fraction after deducting seed and waste), while in terms of net availabilities of oil, the exported share of the 1976 crop is pegged at 60 percent.

Brazil also appears to be emphasizing exports of soybean products rather than soybeans as such. If this trend continues, European and U.S. crushers could find it increasingly difficult to operate their facilities at high levels of capacity.

Brazil's aggressive strides in achieving production growth are already causing concern about the need for expanding foreign markets. Most recently, Brazil reportedly has attempted to move increased quantities of soybeans to Japan as well as to the People's Republic of China—a sizable soybean producer and exporter in its own right. The United States comparative advantage on freight to these markets should preclude any serious long-term erosion of the U.S. market share in Japan. The situation in Europe, however, is another story since U.S. exports have already lost considerable ground there to Brazilian exports.

Dominant in Brazil's future plans for soybean exports are improvements in internal transportation, deepened channels, better port facilities, fuel tax rebates, and expanded crushing facilities. A number of these changes could eventually lead to reduced transportation costs and thus make Brazilian beans even more competitive with the U.S. product.

ALSO, although Brazilian soybean producers are disadvantaged relative to U.S. farmers in paying higher internal transportation and handling charges, land prices in Brazil are significantly below those in the United States, thus reducing fixed costs. In addition, the higher proportion of double cropping in Brazil has significantly cheapened Brazil's soybean production costs relative to those in the United States.

**Malaysian palm oil.** Aside from a dimming of Malaysia's 1976 production prospects because of drought, little has happened to change the bright future potential of this crop. Productive oil-palm acreage is fixed well in advance, and yields appear to have a far higher degree of stability than for many of the annual crops.



*Top to bottom:  
Aerial view of  
soybean facilities  
in Brazil's Mato  
Grosso State; a  
soybean storage and  
assembly point in  
Brazil, bagged  
soybeans at Brazilian  
cooperative, and  
loading soybeans  
at the cooperative.*





West Malaysia—the largest major producer-exporter of palm oil and center of the expected growth in production and exports — experienced rather dry weather in several producing areas a few months ago. No one seems to know what the effect will be, however, since the dry spell was the worst in recent years. Historical comparisons show the sharpest decline in palm oil yields took place in 1964, when the yield dipped nearly 8 percent from the previous year's to a level 11 percent below the long-term trend.

Taking the unfavorable weather into account—and assuming that yield will decline 4 percent to a level 14 percent below the long-term trend—Malaysian palm oil output in 1976 may total 1.31 million tons, compared with 1.14 million in 1975. This represents an increase of only 175,000 tons from last year, compared with that year's gain of 193,000 tons. Malaysian palm oil exports in 1976, however, could rise by nearly 250,000 tons to 1.33 million should stocks be drawn down from the large 1976 carryin of 135,000 tons.

Next year, Malaysian palm oil production is seen rising to 1.56 million tons, or 250,000 tons over the 1976 forecast, with this projection again based on a yield that is 14 percent under the long-term trend. Such a gain would allow exports of 1.54 million tons—215,000 above the forecast for 1976.

Projections from the U.S. Agricultural Attaché in Kuala Lumpur, based on "informed" but unofficial sources, foresee continuous growth in production through 1980, implying gains in exportable supplies averaging about 250,000 tons a year. And since all of the yields are projected well below the long-term trend, the average annual increase could easily turn out to be over 10 percent above the projections.

**R**ECENTLY, there has been evidence of reduced supply pressure from palm oil on the U.S. market, as reflected in a smaller share of Malaysian monthly exports moving to the United States. However, the details are obscured by the fact that monthly export data on processed palm oils are incomplete and an increasing share of Malaysia's exports is now being processed. Also, a substantially higher proportion of the processed palm oil than in 1975 has moved to the United States.

(Last year, the United States took

just under 30 percent of all West Malaysian exports of palm oil, or 242,600 long tons, compared with only 13 percent in 1974.)

#### Future adjustments in import trends.

Current projections of a sharp uptrend in world palm oil production in countries with little capacity for using it domestically portend future shifts in world fats and oils trade.

Over the past decade, world imports of all fats and oils, excluding the oil fraction of oilseeds imported for their protein, rose by about 400,000 tons per year. These expanded imports accounted for 34 percent of the growth in world fats and oils consumption during 1965-74. Imports of palm oil during the same period gained at an annual rate of 126,000 tons, thus accounting for nearly 32 percent of the growth in world fats and oils trade.

Looking to 1976-80, annual growth in palm oil output in the five major exporting countries is projected to accelerate to about 325,000 tons per year, with about 300,000 tons of this moving into export each year. Thus, palm oil exports alone could account for nearly 70 percent of the expansion in exports of fats and oils.

Such a rapid acceleration can take place only if—

- Per capita consumption of fats and oils in fat-deficit markets accelerates;
- Some of the growth in imports of other fats and oils products can be supplanted; or
- Other, nonfood, uses can be developed in key markets.

Given the past experience of a relatively inelastic domestic demand for fats and oils, the first alternative is unlikely.

The second alternative is limited by the present growth structure in world fats and oils imports. The historical import trend for all the major fats and oils increased at an annual rate of about 400,000 tons during the 1965-74 period, broken down as follows (in 1,000 tons):

Animal .....	53
Soybean .....	99
Cottonseed .....	6
Peanut .....	2
Olive .....	23
Sunflower .....	16
Rapeseed .....	17
Coconut .....	32
Palm kernel .....	16
Industrial .....	10
Subtotal .....	274
Palm .....	126
Total .....	400

The annual uptrend in U.S. exports of soybean oil and animal fats during 1965-74 amounted to 24,000 and 21,000 tons, respectively. A large share of these added exports moved under Government programs to developing countries, substantially boosting the fats and oils consumption in many countries lacking the hard currency to pay for their purchases. Without such Government programs, more oil would have moved to traditional commercial markets at substantially lower prices.

In addition, Brazil's exports of soybean oil trended upward by 6,000 tons annually during 1965-74. Recently, this expansion has accelerated sharply, with Brazilian soybean oil exports soaring from less than 100,000 tons in 1974 to 420,000 estimated for the 1976 marketing season beginning April 1. Another sharp gain to 500,000 tons is seen for 1977.

**T**HE BULK of the remaining 69,000-ton annual growth in world soybean oil exports reflected re-exports of oil from protein-deficit countries that import U.S. soybeans for meal.

The data indicate that the most growth in fats and oils trade comes from products that are unresponsive to price changes. The combined growth in world trade, as viewed from this aspect, reveals the following:

Item	Annual trendline growth volume	Share of total
	1,000 metric tons	Percent
Tree crops .....	197	49
Byproducts (largely animal) .....	59	15
Industrial oils .....	10	2
Products for meal ....	99	25
Subtotal .....	365	91
Price-responsive high-oil crops .....	35	9
Total .....	400	100

The additional palm oil exports, plus expected above-trend growth in Brazilian soybean oil exports and Philippine coconut oil exports, will substantially increase exportable supplies of fats and oils during 1976-80.

Thus, even if growth in U.S. exports of soybean oil and animal fats came to a halt and combined world growth in sunflower, rapeseed, and peanut oil trade were nil, fats and oils imports will have to gain sharply from their past

*Continued on page 8.*

# Improving World Economy May Boost U.S. Farm Exports

By O. HALBERT GOOLSBY  
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LED BY A VIABLE recovery in the three leading economic powers—the United States, Japan, and West Germany—much of the world is emerging from the recession that swept the globe in 1974 and 1975. World trade likewise is rebounding, following a 6 percent drop last year, and some sources are now predicting an 8-9 percent real growth rate in trade over the next 12 months.

Historical data show that an expansion in world trade usually means an expansion in U.S. agricultural exports. Crop conditions and trade policies instituted by governments abroad play a major role in determining the volume and value of U.S. farm exports, but economic conditions account for a significant proportion of year-to-year variations as well as direction of long-term growth trends.

The United States started its economic recovery in the spring of 1975. The basis of this expansion has been personal consumption expenditures, although accumulation of business inventories has contributed erratically as well.

The expansion is in part reflected in the rate of unemployment—while still high by historical standards, it has declined since May 1975. Also, industrial production has increased since April last year, and fixed investments have increased since the second quarter of 1975. The increasing value of manufacturers' new orders points to strength for the future, as do other leading economic indicators.

Because of its strong balance-of-payments position and its relatively low rate of inflation, the United States was in a good position to lead the world recovery, strictly by domestic developments. It was not forced to await an export-led expansion, as were Japan, the United Kingdom, Italy, a number of smaller developed nations, and al-

most all the less developed countries (LDC's).

The strong balance-of-payments position of the United States results, to a considerable extent, from the level of U.S. agricultural exports. In both fiscal 1974 and 1975, agricultural exports were over \$21 billion, with commercial exports over \$20 billion. Also, the low rate of inflation—relative to that in nearly every other nation—results in part from an agricultural sector that is both efficient and flexible, especially under present policies that allow farmers the greatest freedom in reacting to market forces.

U.S. expansion has resulted in a fairly rapid increase in imports—from \$7.1 billion in June 1975, to \$9.2 billion in May 1976, with many of these imports coming from Japan. Since May 1975, U.S. imports from Japan have accelerated from \$800 million in that month to \$1.2 billion in May this year.

The outlook for Japan's economy appears bright, too. Supprred on by booming exports, particularly of automobiles and TV sets, Japan's economy progressed extremely well in the first half of this year. Real growth in the first quarter was 6.2 percent over that of a year earlier. This follows a decline of 0.9 percent in 1974 and a weak growth of only 2.1 percent in 1975.

THE JAPANESE Government calculates industrial output in March at 92 percent of its level in December 1973, the month Japanese production reached its historical peak. The volume of export letters of credit opened in Japan—a figure usually taken as a portent of export levels—rose by 27.6 percent in March from that of a year earlier. In April it was up by a corresponding 22.6 percent.

As a result of these forces, forecasts now indicate an economic growth rate for Japan of about 6 percent over

the next 12 months. Any increase in food consumption resulting from increased economic activity almost certainly means greater agricultural imports, since Japan cannot expand significantly its domestic production of food.

Japan's growth will benefit U.S. farm exports in another way. Two major markets for these exports—South Korea and the Republic of China (Taiwan)—depend heavily on Japan as a market for their exports. As Japanese imports from these nations expand, the employment situation and foreign exchange earnings for these two nations improve, and they are able to increase imports. This is also true for a number of other markets in the Far East—Malaysia, Indonesia, and Singapore, for example.

Unlike Japan, West Germany's balance-of-trade position remained in surplus during all of the 1974/75 recession, and the rate of inflation was even less than in the United States. On the other hand, West Germany's economic growth was negligible in 1974 (0.4 percent) and negative in 1975 (−3.5 percent). Fortunately, in the last quarter of 1975 and the first half of this year, economic growth returned and has been proceeding at an unexpectedly high rate.

In January-April 1976, exports increased 12 percent over those for the same period last year, while imports were up 19 percent. Output of automobiles increased nearly 36 percent, with about 45 percent of the output exported. This increase in activity is being stimulated by both foreign and internal demand, as indicated by the large increases in both exports and imports.

In light of increased consumer demand, exports, and business purchases of equipment, many forecasters now see West Germany's 1976 growth hitting more than 6 percent, with the strongest expansion in the first half of the year.

With growth taking place in these three industrial giants, delayed yet fairly strong growth has started in France, Canada, Denmark, and the Netherlands. All four of these countries depend heavily on exports to keep their economies moving. One-fifth of France's gross national product is exported, one-fourth of Canada's, one-third of Denmark's, and one-half of the Netherlands.

*Continued on page 12*



# USSR Buys U.S. Soybeans

THE RECENT purchase of 1.7 million metric tons of soybeans, including 1.5 million tons of probable U.S. origin and 200,000 tons of Brazilian origin, may signal the opening of a steady long-term market for oilseeds in the Soviet Union. The recent USSR purchase of soybeans appears to be designed to maintain crushing mill operations at a maximum and insure protein supplies for the rapidly developing mixed feed industry.

Soviet domestic oilseed production and procurement again appear unable to meet the escalating requirements.

Soviet sunflower plantings in 1976 are estimated at 4.75 million hectares, about unchanged from those in 1973-75. Planting was slightly later than normal, but the Soviets said planned planting had nearly been completed on May 24.

May weather was cooler than normal and June weather was both cooler and wetter than normal in the major sunflower areas of the Ukraine, Moldavia, and the north Caucasus. Dryness was a key factor in southern Krasnodar, Stavropol Kray, large parts of the Kuban, Odessa oblasts, the Crimea, and southern Moldavia.

Observations of representatives to the international sunflower conference held in Krasnodar recently revealed fairly widespread moisture deficiencies and early stress. The high seeding rate and resulting concentration will make the sunflower vulnerable to any prolonged dry periods. Hailstorms were reported in the Armavir area on July 5.

Weather from now to harvest is likely to have the most significant effect on sunflower yields. Continued cool, rainy weather could delay plant development, increase already present insect infestation, and lead to lower output. Given prospects of late maturity and low stocks resulting from last year's reduced harvest of 5.0 million tons—2.4 million below plan—the upcoming harvest will be of critical concern to the Soviets.

Sunflower yields are now expected to be somewhat higher than in 1975, and assuming lower abandonment than last year, the 1976 crop may approximate 6.3 million tons. In 1975, about 700,000 hectares were either harvested early for silage or abandoned as the seed failed to mature following the droughts.

There are about 180 sunflowerseed

crushing plants in the Soviet Union, including 100 small rural mills. Based on recent information from the Ministry of Food Industry, Soviet vegetable oil capacity reached 6.5 million tons in 1976. For the 1976/77 season, capacity in the State sector may total about 6.75 million tons. In addition, the small rural mills have an additional 1.5 million tons of capacity for processing locally produced seed not delivered to the State procurement agencies.

When processing soybeans, Soviet sunflowerseed tonnage is sharply reduced. The Armavir plant, one of Russia's largest and most modern, which processed about 254,000 tons of sunflowerseed in 1974/75, can only process 140,000 tons of soybeans annually. Soybeans are dried, if necessary, then prepared and run through a prepress operation, also followed by extraction. However, as soybeans contain up to twice the cake of sunflowerseed, and about one-third of the oil, the prepress, extraction, and desolventized equipment reduce the effective capacity for soybeans by nearly 50 percent.

With USSR sunflower prepress solvent capacity in the State sector estimated at 6.75 million tons for the 1976/77 crop and procurement projected at only 4.8 million tons—assuming a crop

of about 6.3 million tons—about 2 million tons of sunflower capacity would have remained underutilized. In terms of soybeans, this equals about 1 million tons of imports.

USSR soybean production in 1976 is currently forecast to range between 400,000 and 500,000 tons, well below the record 1975 level of 780,00 tons. Late frost damage was reported in the soybean area.

With procurement of only 300,000 to 400,000 tons, an additional solvent extraction capacity of 400,000-500,000 tons could be available in the Soviet Far East. Excess capacity in the flexseed area may provide an additional 200,000 tons of capacity for processing soybeans. Thus the Soviet Union, under the above production and procurement assumptions, could import 1.7 million tons of soybeans for processing in 1976/77.

The 1.5-million-ton cold press capacity of rural sunflower mills on collective farms not in the State sector provides greater flexibility in handling imported soybeans. By reducing procurement, larger quantities of sunflowerseed could be processed in rural mills, thus releasing solvent capacity in State factories for extraction of additional quantities of imported soybeans. Also, the Soviets have indicated that the storeability of soybeans was an important factor in the recent large purchase.

USSR SUNFLOWERSEED PLANTING PROGRESS—1976<sup>1</sup>

Week Ending	April 19	April 26	May 3	May 10	May 17	May 24
Planting per week (million hectares) ..	0.8	1.4	1.0	<sup>2</sup> 0.9	0.4	0.1
Cumulative total (million hectares) ..	.8	2.2	3.3	<sup>2</sup> 4.1	4.5	4.6
Percent of plan .....	17.0	48.0	71.0	90.0	98.0	99.6

<sup>1</sup>Excluding private plots. <sup>2</sup>Calculated from reported percent of plan plants as of May 10.

USSR SUNFLOWER DATA—1970-76

Year	Harvested area	Yield	Production <sup>1</sup>	Procurement <sup>2</sup>	
				Actual	Plan
	Mil. hectares	Quintals per hectare	Mil. metric tons	tons Mil. metric	Mil. metric tons
1970 .....	4.8	12.8	6.1	4.6	4.6
1971 .....	4.5	12.6	5.7	4.4	5.3
1972 .....	4.4	11.4	5.0	3.8	5.4
1973 .....	4.7	15.5	7.4	5.6	5.5
1974 .....	4.7	14.4	6.8	5.2	5.7
1975 .....	4.0	12.2	5.0	3.8	5.9
1976 <sup>3</sup> .....	4.7	13.5	6.3	4.8	( <sup>4</sup> )

<sup>1</sup> Includes 8 percent dockage; moisture may vary from 12-18 percent. <sup>2</sup> Twelve percent moisture, and foreign material, 1 to 3 percent. <sup>3</sup> Preliminary. <sup>4</sup> 6.0 million metric tons planned average, 1976-1980.



# Whey Use Plagues World Dairy Industry

By DAVID R. STROBEL  
*Foreign Market Development,  
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**W**HEY UTILIZATION is still a hard nut for the dairy industry to crack.

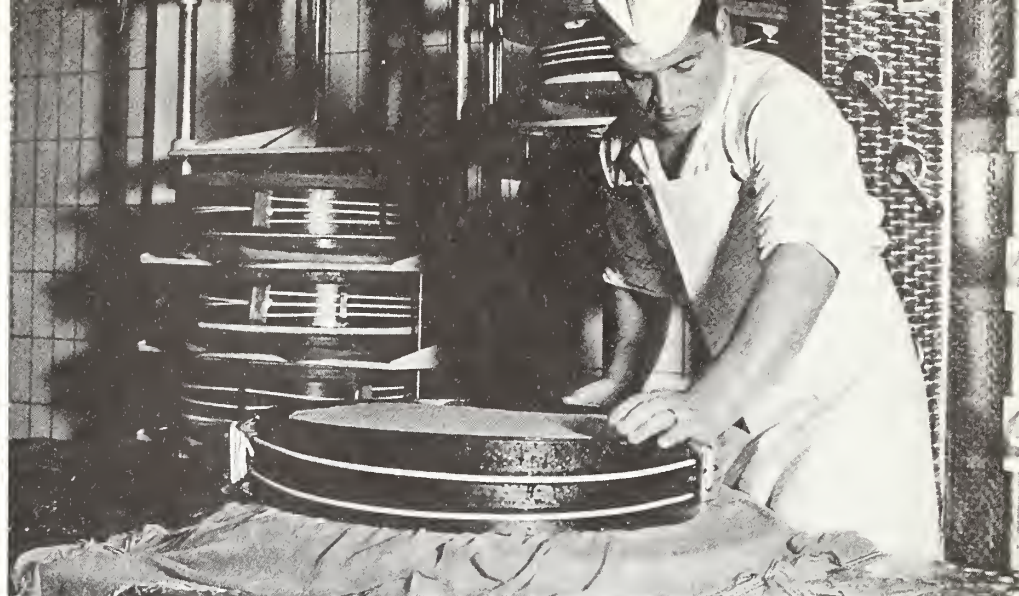
Although extensive thought has been given for some time to ways to solve this dilemma, the scientific community has failed to develop sufficient new uses for this byproduct of the cheese-making process. Whey is still largely employed as a component of animal feed, although some is used for human food.

When *Foreign Agriculture* last reviewed the whey situation (Nov. 13, 1972), disposal and sales were major problems but there were high hopes these would be solved. It was believed that with strong efforts—including a concerted push to develop new, specialized uses capitalizing on whey's high food-property content—its potential as a nourishment source would open large, new sales opportunities.

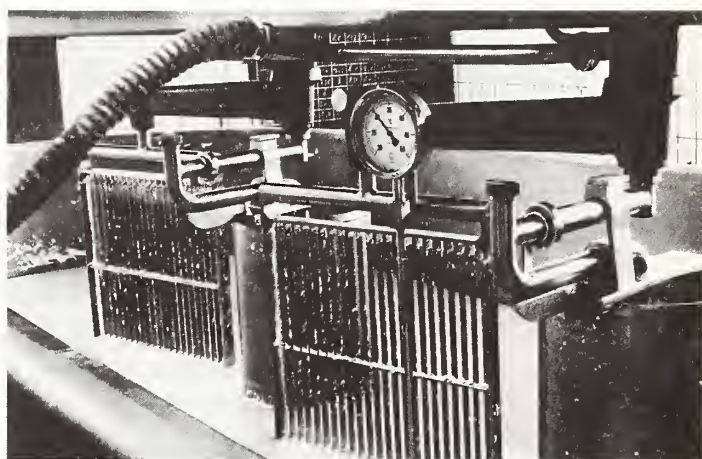
Unfortunately, no major utilization breakthrough has occurred. World milk production has increased and cheese production has continued its upward trend with an accompanying rise in whey production. As a result, the dairy industry's whey problems have grown in magnitude and animal feed is still the main outlet for this product.

But even here whey may suffer. With the current nonfat dry milk (NFDM) situation, whey may lose out to nonfat dry milk as a feed ingredient—particularly in the European Community.

In 1972, dairy countries over the world had few official statistics. There was little knowledge of the volume of whey utilized for feed and food, current marketing data were limited, and there were even fewer facts about what the future might hold. While there has been some improvement since then, much remains to be done in the further development of statistics and market



*Top: Cheese being pressed (in press in background). During this process more whey is removed. Right: Cheese in one of the stages of manufacture showing whey. Whey utilization is one of the problems facing the worldwide dairy industry. It had been hoped that a breakthrough would be made and many new ways would be found to use whey, but this has not happened. And whey may lose out to nonfat dry milk as a feed ingredient.*



information before anyone can provide a precise picture of present and future situations.

Based on actual and derived statistics, the United States, the EC, Switzerland, New Zealand, Australia, and Canada produced an estimated 103.3 billion pounds of liquid whey in 1975. From this total, 1.8 billion pounds of dry whey were manufactured. This is less than one-fourth of the estimated 7-billion-plus pounds of dry whey that could have been manufactured had all of the liquid whey been converted.

Excluding that produced in the United States, only about 17 percent of the dry whey manufactured in the rest of the world was used in human food preparations and about 83 percent in animal feed. In the United States, about 68 percent was used for human food and about 32 percent for feed. Compared with other dairy countries, the United States has made great strides in developing food uses for whey.

U.S. dry whey production in 1975 was 740 million pounds—60 million pounds greater than 1971's. The 1975 output utilized about 45 percent of U.S. liquid whey production. In the same year, EC dry whey production was a little over 1 billion pounds—utilizing an estimated 28 percent of its liquid whey.

While little is known about the size of world whey stocks, NFDM supplies are over 4 billion pounds, of which over 2.6 billion pounds are stockpiled in the European Community.

Recently, the EC has undertaken measures to reduce its gigantic nonfat dry milk surplus. It is forcing feed compounders to incorporate 880 million pounds into poultry and pig rations by October. It also is increasing its nonfat calf feed subsidy to encourage use of 440 million more pounds, and is endeavoring to move another 440 million into overseas food aid. How successful these EC efforts will be remains to be seen. But even if successful,



if 1976 production is at the anticipated level, the EC's ending nonfat stocks could still be close to 3 billion pounds.

The United Kingdom reportedly produced 66 million pounds of dry whey in 1975, half of which was exported. Germany manufactured 198 million pounds of dry whey, about 6.6 million pounds for food uses.

In Denmark, 90 percent of the liquid whey was returned to farmers for hog feeding. But Denmark still imported 2.3 million pounds of dry whey from other EC countries for about 18 cents per pound.

The EC's dry whey price range in 1975 was from 6.1 to 17.6 cents per pound.

Australia uses considerable quantities of liquid whey for pig feed. But as of the present, so little whey is being dried it is apparently impossible to get processing costs or dry whey selling prices. According to reports, liquid whey disposal includes use in irrigation and pumping into the sea.

In 1975, New Zealand produced 1.7 billion pounds of liquid whey, with its dry whey output principally intended for export. New Zealand shipped 4.3 million pounds to nine export markets in 1975—mainly Fiji, Australia, and Japan. The average export price was between 12 and 13 cents per pound, with some prices varying from the average by large amounts.

Canada's 1975 dry whey production is reported at 6 million pounds, Swiss output at 5 million pounds.

Outside of figures on trade within the EC, the only other significant ones available are for Japan's imports. In 1975, that country imported 26.5 million pounds of dry whey at an average c.i.f. price of 15 cents per pound. The United States was Japan's major supplier, providing 13.2 million pounds.

In 1971—when dry whey imports were 6.7 million pounds—the Japanese Government adopted a policy of substituting dry whey for about 20 percent of the 75 million pounds of nonfat dry milk imported for feed. A recent policy has boosted the whey utilization rate to 30 percent. Despite this increase in whey's usage, Japan is still importing over 80 million pounds of nonfat dry milk a year for feed.

Although available information on the production and marketing of dry whey is incomplete, it is apparent that whey's principal utilization as feed will be adversely affected as pressure con-

tinues to mount to relieve the burdensome nonfat dry milk surplus by structured programs, as in the EC, and by severely cutting the price for feed nonfat dry milk. This could affect whey feed usage by Japan.

Until there are drastic structural changes to reduce milk supplies, or until there is free trade in dairy products to force a balance between supply and demand, there will be continuing problems in the world dairy market, of which whey disposal is only one of many.

In the foreseeable future the biggest dairy problem will be the marketing of

## JAPAN BOOSTS TOBACCO OUTPUT, IMPORTS

Japan's production and imports of leaf tobacco and sales of cigarettes all increased during 1975 over 1974 levels, reports Larry F. Thomasson, U.S. Agricultural Attaché in Tokyo.

The rise in production is attributed to incentive payments offered for the first time to new growers planting more than 0.49 acres in flue-cured and 0.25 acres in native or burley, and to regular producers who expand area by 0.25 acres for flue-cured and 0.12 acres for native or burley.

The incentive program was not continued into 1976 because of greater interest from producers in expanding area, chiefly a result of greater availability of labor.

Leaf imports in 1975 were 30 percent higher than 1974's—an estimated 95,989 metric tons that was partly a result of stock rebuilding. The U.S. share rose to 52 percent, compared with 49.1 percent in 1974.

However, leaf imports are expected to decline during 1976 to 90,000 tons as stocks near normal levels. Imports from the United States are expected to be about 50,000 tons, according to Thomasson.

Cigarette sales in 1975, estimated at 304 billion pieces, showed a substantial 7 percent increase over the year-earlier total. The increase is partly a result of consumer stockbuilding.

The 1976 grower price is scheduled to be announced in September. In view of the Government's efforts to keep increases in consumer prices and wages below 10 percent, it is expected that the grower price increase will be around 10 percent.

nonfat dry milk. The continuing accumulation of NFDM stocks—with strong pressures to reduce them—can only mean more nonfat dry milk moving into the world market at very low prices. Recently, the agreement between the EC, Canada, New Zealand, and Australia to maintain a minimum export price for nonfat dry milk has become—for practical purposes—inoperative.

It is now a "free for all" in selling nonfat dry milk in the world market. This can only mean a very difficult market situation for dry whey.

## Brazil, Malaysia Oil, Meal

*Continued from page 4*

growth rate to absorb the expanded exportable supplies.

So far, there has been no growth in oil imports among the centrally planned countries, indicating that most of the future expansion will be among developed or developing countries. And since much of the import growth in the developing countries has come as a result of U.S. Government programs for soybean oil and animal fats, it is questionable how much expansion can be achieved there.

Consequently, as in the past, the bulk of growth in fats and oils imports will probably be in the developed countries.

In the United States the soybean oil/palm oil price spread has narrowed considerably in recent months, which may temporarily cool the sharply rising tide of U.S. imports. But in the future this country will continue to face a steady stream of increasing world exportable supplies of palm oil.

How and where this palm oil will be used remains to be seen. However, since palm oil is probably best suited for use as a baking and drying fat—and the United States is the world's largest market for products with these qualities—further expansion in U.S. palm oil imports could well take place. This would appear logical since key exporting countries enjoy lower freight rates to the United States than to most other major markets and since the U.S. market is free of import restrictions on palm oil.

The final alternative use for palm oil—diverting sizable quantities during surplus periods to nonfood use, including soaps and animals feeds—is a possibility. However, a definitive appraisal of uses has yet to be made.



# Coffee Output in 1976/77 Forecast Down 16 Percent

By J. PHILLIP ROURK

*Foreign Commodity Analysis, Sugar and Tropical Products  
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**T**HE FIRST 1976/77 world coffee estimate by the Foreign Agricultural Service (FAS) shows production down 16 percent to 60.5 million bags (132.3 lb) from 71.8 million in 1975/76, largely owing to lower Brazilian production. This is the smallest crop since 1970/71, when total world production amounted to only 58 million bags.

Coffee available for export in 1976/77 is estimated to be down 19 percent to 42.7 million bags from 52.9 million the previous year. Precise data regarding consumption are not available. However, FAS has reduced its estimate of consumption in the producing countries by nearly 10 percent to compensate for the anticipated impact of higher prices.

The decrease in world production of coffee this year—as it did in 1970/71—comes as a result of a severe frost in Brazil in July of the preceding year. During 1976/77, Brazil is expected to produce only 9.5 million bags, down 59 percent from an estimated 23 million bags last year.

Prices of all four major types of green coffee—Colombian Milds, Other Milds, Arabicas, and Robustas—continued to advance during the second quarter of 1976 at an even faster pace than in the first 3 months of the year, with Colombian Milds and Robustas showing the largest increase up to early June.

The major factors accounting for the continued upward price movement appear to be the anticipated tight supply situation for the 1976/77 year, a firm cash market, reported Brazilian purchases of Angolan coffee, and the fact that most Central American stocks had been sold out by May.

An interesting phenomenon in the world coffee market has been the continued strong demand for coffee at the importer, roaster, and even retail level, despite the currently high price level. It is estimated that U.S. imports of

green coffee during January-May 1976 totaled about 9 million bags, up 1.1 million from those of the same period in 1975. Roastings have kept pace with imports, with an estimated 9.2 million bags roasted to the end of May 1976, compared with about 7.9 million bags to the same date in 1975.

Despite the high level of imports—18 million bags of green coffee during August-May 1975/76—stocks of green coffee in the United States have fallen 900,000 bags since October and, at the end of April, were estimated at 3.2 million bags.

There is some evidence that not all of the coffee being sold at retail is actually being consumed. Some may be going to build up inventories at the household level, as consumers stock up in anticipation of still further price rises.

Should this prove to be the case, it is reasonable to assume that at some point the household stockpiling will cease, with a consequent slowdown in roastings. It is apparently for this reason that both importers and roasters appear to be buying cautiously and allowing U.S. stocks to run down somewhat.

It appears unlikely that coffee prices will decline significantly in the near future, however, in view of the approaching frost season in Brazil and the limited amounts of past-crop coffee still available in most exporting countries. Should the frost season pass without incident, it is possible that the market may temporarily weaken. This would be more likely if a policy of "living off inventories" at both the consumer and roaster level were to manifest itself at the same time.

**North America.** Partially offsetting the reduced Brazilian crop will be expanded output in the North American coffee producing countries. Preliminary estimates indicate that their 1976/77 coffee harvest will be a very good one,

approximately equal to the record 1974/75 crop.

Weather during the blossoming period was generally favorable and production in some countries, notably El Salvador and Guatemala, will be rebounding from poor harvests in the current year. Estimates based solely on flowerings, however, are necessarily tentative and may require adjustment at a later date.

Currently estimated at only 2 million bags, El Salvador's 1975/76 crop was the smallest since 1968/69. However, the 1976/77 crop may equal the record 1974/75 harvest of 3.3 million bags if weather conditions remain favorable. Superior cultivation practices, increased plant density, and heavy fertilization are primary factors responsible for the anticipated high yields.

In Guatemala as well, prospects are for a more normal crop in 1976/77 following the small 1975/76 harvest. Coffee production is expected to increase during the next few years as a result of greater density, wider use of high-yielding varieties, and heavy fertilization. To prevent extensive crop damage, new and intensified efforts are underway to stem the further spread of the coffee bean borer.

A slightly larger harvest is anticipated in Mexico for 1976/77, in line with the gradual upward trend of recent years. The flowering in Veracruz, a leading coffee producing State, was reported good. Exports of about 2.5 million bags are expected in 1976/77.

The acreage under coffee in Nicaragua has remained stable in the past few years. Nevertheless, with gradually improving technology, production may reach 760,000 bags, a new record, in 1976/77.

**P**RODUCTION in Honduras, the Dominican Republic, and Haiti is expected to be at about the average level of the past few years, while the prospects in Costa Rica are for a better-than-average crop.

**South America.** Coffee production in South American countries other than Brazil is expected to increase in 1976/77 by more than 5 percent compared with the previous year. However, total South American coffee production in 1976/77 will probably decline by more than 37 percent from that of the current year, reflecting the impact of a very small Brazilian crop.

The size of the 1976/77 coffee har-

vest in Brazil has, of course, been the subject of much conjecture and speculation in recent months. The Brazilian Coffee Institute (IBC) and the State Government of São Paulo have made estimates of the crop based on field surveys, and various unofficial estimates have also been reported, ranging from about 6.5 million to 10 million bags, with most toward the lower end of the range.

Based on several field trips to the growing areas, the most recent in early April, FAS estimates 1976/77 production at 9.5 million bags. This reflects not only frost damage in Paraná and São Paulo, but also losses due to prolonged drought in 1975, particularly in São Paulo.

Weather during recent months has been favorable and trees are recovering nicely from last year's frost. Complete recovery of the trees is contingent upon an absence of excessively cold weather during June-August, as well as adequate rainfall.

Recent reports from Colombia indicate that rain damage to the 1975/76 coffee harvest was less than early estimates. The estimate, therefore, has been revised upward from 8.1 million to 8.5 million bags. It is still too early for a firm forecast for 1976/77; however, based on favorable weather and recent production trends, the FAS estimate at this time is for production of 9 million bags, equal to the 1974/75 harvest.

It continues to be difficult to estimate

coffee production in Ecuador with any degree of precision and the situation is further complicated by cross-border movements of coffee from both Peru and Colombia. The preliminary estimate for 1976/77 is for a near-record harvest of 1.3 million bags.

The 1976/77 coffee production estimates for Peru and Venezuela foresee a 100,000-bag gain in Peru, but a 160,000-bag decline in Venezuela.

**Africa.** As a result of minor revisions in the estimates for Cameroon, the Ivory Coast, Rwanda, and Zaire, the estimate of 1975/76 coffee production in Africa has been reduced by about 200,000 bags to 17.5 million. The first estimate for 1976/77 is for a coffee crop of about the same size, with modest increases

*Continued on page 12*

## *Coffee Outlook One of High Prices, Lower Consumption*

Following almost 20 years of surplus, the world coffee supply and demand situation is reversing. By the end of the 1977/78 season, world carryover stocks of coffee are expected to be well below the 20-million-bag level and may represent only a 3- or 4-month supply for world trade, though total coffee supplies should be adequate for requirements. This is a far cry from 1965/66 when world coffee stocks reached of roughly 83 million bags.

The changing coffee supply picture has resulted in record-high prices of wholesale and retail roasted as well as green coffee. The price was anticipatory, as stocks will be drawn down beginning with the 1976/77 crop.

The first estimate by the Foreign Agricultural Service shows 1976/77 production down 16 percent to 60.5 million bags (132.3 lb) from 71.8 million in 1975/76. Exportable production for 1976/77 is estimated to be down 19 percent to 42.7 million bags. Trade requirements will probably be about 15 million bags higher, thus reducing carryover stocks by that amount.

The severe frost damage in Brazil in July 1975 is the primary factor for the skyrocketing prices of the past year, having sharply reduced the 1976/77 crop. Other contributing factors include the civil disturbances in Angola, which decreased production by over 2 million bags; the earthquake in Guatemala, which delayed transportation of coffee to market, and the frost's occurrence in Brazil at a time when green coffee stocks were at low levels in both the United States and Europe.

The effect of tighter supplies and high prices is expected to last for the next 3 years—the period of time Brazil may need to make a comeback to normal production. As a result, world consumption during that period is likely to decline by 5 percent or even more, with the largest decline possible in the United States. Roastings in the United States and West Germany, the top two importers of coffee, have been well above the 1975 figures, and although imports have also been up correspondingly, green coffee stocks remain low. Indications are that coffee is being

stocked in the home, and, if this is the case, then import demand will be somewhat slacker in the next few months. Roastings in the United States for the January-May 1976 period amounted to 9.2 million bags, compared with 7.9 million in the same period of 1975 and 8.5 million in those 5 months of 1974.

The composite (four types of coffee) price for green coffee on July 17, 1975, in New York was 61.08 cents per pound. By June 1976 this price was up 150 percent to about \$1.53 per pound. The U.S. price for wholesale roasted coffee in 1-pound cans between mid-July 1975 and May 1976 rose from \$1.215 per pound to \$1.961. As both wholesale and retail roasted prices lag behind green prices by perhaps a couple of months, further increases to the consumer are expected. The green coffee market will be particularly vulnerable through August 1976, as there is danger of frost in Brazil until that time. From then until the end of 1976, the pressure on prices may diminish somewhat as new crops will be coming on the market.

The next 2-3 years will be crucial for the coffee market. Consumer prices, at well over \$2 per pound in the United States, may curtail consumption markedly. The carryover stocks, particularly of Colombian and Other Milds, will sink to low levels by the end of April 1977.

Despite high prices, there does not appear to be a concerted effort to expand coffee acreage. Brazil is likely to rehabilitate a sizable portion of the land taken out of coffee and might be back to a normal level of 25 million bags by 1979/80. Colombia is being cautious on acreage expansion, adding only a few thousand hectares, and other Central American countries are cultivating their crops more carefully.

There is little acreage expansion in Africa, but possible recovery in Angola, and better cultivation methods could result in more production. India is likely to increase acreage and expand production. In the long run, the limited expansion may result in a better balance between production and consumption.

—LESLIE C. HURT, FAS



# Spain's Farm Imports Up Despite Rise in Production

By JAMES LOPES

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SPAIN'S agricultural production has made significant gains in recent years yet its goals—to supply an increasingly larger share of the country's food and fiber needs and to improve its agricultural trade balance—have not been attained.

The United States is usually the most important supplier of Spain's farm product imports, others being the European Community, Brazil, and Argentina. The United States is also a top buyer of Spain's farm exports.

Spain's total agricultural imports rose by one-fourth from 1965 through 1970 to \$814 million, and nearly tripled during 1971-74 to \$2.6 billion. During the first 9 months of 1975, Spain's agricultural imports continued to increase, rising to about \$2.1 billion.

Agricultural imports in 1974 represented 17 percent of all Spanish imports. Higher prices and larger volumes of imported feed have accounted for much of the recent increase in the value of farm imports.

Spain has also become a large agricultural exporter. Its 1974 shipments totaled \$1.5 billion, 3.5 times the level of a decade earlier, representing more than one-fifth of total exports. But in 1974, the value of agricultural exports was equal to only 60 percent of agricultural imports. Spain's agricultural trade deficit, although fluctuating, widened from \$214 million in 1965 to over \$1 billion in 1974. During the first 9 months of 1975, Spain's farm trade deficit totaled \$1 billion, one-fifth above the same period the previous year.

The main reason for Spain's agricultural trade deficit is Spanish agriculture's inability to produce enough grain and other feed for the expanding livestock sector. Feedgrain production rose from 3.4 million tons in 1965 to 5.5 million tons in 1970, and was up to 9.5 million tons in 1975. Much of this increased output was in barley, which more than tripled since 1965, reaching nearly 7 million tons in 1975.

Corn production made a sharp in-

crease in the late 1960's, but has stabilized at about 2 million tons in recent years. Corn expansion in recent years has been limited by competition for irrigated land from other crops.

Meanwhile, feedgrain requirements have expanded more rapidly than output, totaling about 13 million tons in 1975, of which roughly 6 million tons were corn. Feedgrain imports in 1975 totaled 4.7 million tons—mainly corn—more than twice the level of a decade earlier.

In 1974, feedgrain imports amounted to \$675 million, representing more than one-fourth the value of all agricultural imports. During the first 9 months of 1975, feedgrain imports amounted to \$539 million, one-tenth above the com-

*"The United States provided roughly a third of Spain's agricultural imports in 1973 and 1974."*

parable period in the previous year.

Oilseeds—mainly soybeans—and oilseed residues combined are the second largest contributors to Spain's agricultural trade deficit. In 1974, oilseed imports amounted to \$466 million (compared with \$52 million in 1965), and represented nearly one-fifth the value of total farm imports. During the first 9 months of 1975, oilseed imports amounted to \$335 million.

Spain has been crushing approximately 2.3 million tons of oilseeds annually in recent years—mostly imported—producing an average of 1.7 million tons of cake and meal. But this output has not been sufficient to meet requirements. U.S. exports of high protein feed to Spain have ranged from \$7.8 million in 1965 to \$47.2 million in 1973 to \$8.2 million in 1974 and \$20.6 million in 1975. The bulk of these U.S. exports were soybean cake and meal.

Between 1965 and 1970, red meat production rose nearly 60 percent to 957,000 tons, and by 1975 was up 27 percent more to 1.2 million tons. Imports of meat and meat preparations were valued at \$161 million in 1973, dropping to \$67 million in 1974, mainly beef from South America.

Demand for milk and milk products has greatly exceeded rises in production of these products. Between 1965 and 1975, cow's milk output rose by one-half, but imports of dairy products increased 3.7 times from 1965 through 1974 to \$93 million. During the first 9 months of 1975 dairy imports were up 15 percent to \$74 million.

Reduced cotton production in most of the past several years has meant substantially larger imports. In 1974, cotton imports totaled 78,000 tons valued at \$110 million, compared with 33,000 tons valued at \$22 million a decade earlier.

Higher prices and substantially larger volumes have also pushed up the value of imports of products such as coffee, tea, and spices; dry legumes; and fruits and vegetables.

The United States provided roughly a third of Spain's agricultural imports in 1973 and 1974. In 1975, Spain was the eighth largest commercial market for U.S. farm products, taking about \$776 million worth, more than 5 times the 1965 level. Feedgrains (including 3.2 million tons of corn) and soybeans (1.3 million tons) made up 85 percent of the total value of U.S. agricultural exports to Spain in 1975. Inedible tallow, tobacco, cotton, and hides and skins also have been important U.S. farm exports to Spain in recent years.

The United States has also been an important outlet for Spain's agricultural products. U.S. agricultural imports from Spain were a high \$171 million in 1974, declining to nearly \$152 million in 1975. In 1975, the United States took \$56 million worth of Spanish olives, and in recent years U.S. purchases have accounted for more than half of Spain's olive exports. Spanish wine and olive oil were other U.S. imports.

The Spanish Government's overriding goal is to reach self-sufficiency in the livestock sector, but keeping the output of feeds in step with demand will not be easy. It is anticipated that despite Spain's effort to achieve self-sufficiency in farm products, Spain's agricultural imports, particularly feeds, will continue to increase.



First Class

## Coffee Output Down

*Continued from page 10*

for Cameroon and Kenya offset by a decline in Uganda.

The 1975/76 estimate for the Ivory Coast has been reduced slightly to 4.5 million bags and the first estimate for 1976/77 remains at the same level. Both coffee acreage and production have been stable in the Ivory Coast except for occasional wide fluctuations due to unusual weather conditions. Exports in recent months have been heavy. It is estimated that all old stocks, as well as about 70 percent of the 1975/76 harvest, had been sold by the end of April.

Reliable information concerning coffee production in Angola is difficult to obtain. Although active fighting has died down, the situation remains uncertain as a result of the large number of abandoned plantations and an apparent labor shortage. Production for both 1975/76 and 1976/77 is estimated at 1.2 million bags. Exports from Angola have held up remarkably well, with most of this coffee presumably coming from carryover stock from previous harvests. Following a reported sale to Brazil—estimated between 500,000 and 800,000 bags—it has been estimated that very little old-crop coffee remains.

Third country reports indicate that coffee production in Uganda, Africa's other large Robusta producer, continues to decline slowly.

Based on reports of excellent flowerings it would appear that Ethiopia, which had a good coffee crop in 1975/76, will repeat again in 1976/77. The final outturn in 1976/77 could be adversely affected by unfavorable weather or outbreaks of coffee berry disease, which has become a serious problem.

Favorable weather, along with in-

creased attention to fertilization and disease control, point to the possibility of record production for Kenya in 1976/77. Preliminary estimates are for a crop of 1.3 million bags.

Coffee production in Cameroon should be up 5 or 6 percent over last year's rather modest harvest, but still below the record 1974/75 crop.

In the remaining countries of Africa prospects are for a level of production virtually the same as in 1975/76.

**Asia.** Though little information is available at this time it is likely that coffee production in Indonesia will be off about 10 percent in 1976/77.

Barring unfavorable weather in the

months ahead or an unusual incidence of disease or insect problems, India should have a very large coffee harvest in 1976/77. A rather conservative estimate at this time is for a crop of nearly 1.8 million bags.

This level of production reflects not only favorable weather conditions in past months, but also the continued interest of the Coffee Board in increasing production in traditional areas and extending it to new States, particularly Andhra Pradesh. There has also been a commensurate expansion in Indian coffee exports in recent years and, in the 1976/77 crop year, exports may reach 1.2 million bags.

## World Economic Conditions

*Continued from page 5*

**F**OR THE EUROPEAN COMMUNITY (EC) as a whole, the EC Commission predicts a growth of 4.5 percent in 1976, compared with a decline of 2.5 percent in 1975.

So strong are the signs of world growth that some economists are again becoming concerned about accelerating inflation. With increased demand and some supply problems, prices in the first half of 1976 strengthened for cocoa, coffee, copper, corn, cotton, lead, tin, rubber, steel scrap, soybeans, and other internationally traded goods. In general, prices of industrial materials and agricultural items increased about 25 and 9 percent, respectively, from January through April. At the consumer level, prices in the industrial nations rose 1.1 percent in April, compared with 0.6 percent in February and March. The softening effects on prices of a bountiful wheat harvest of roughly 2 billion bushels expected in the United States is offset to some extent by spotty crop conditions in the USSR and poor

crop conditions in Western Europe.

With carefully drawn fiscal and monetary policies, wise use of presently unused industrial capacity, and sufficient investments when bottlenecks arise, inflation need not occur.

Increases in world trade and in the price of industrial materials will benefit most of the developing countries. In 1975, imports by industrial nations from the developing nations were off, but the developing nations were unable to reduce the value of imports because of the hardships that would follow.

Consequently, the LDC's collectively incurred a current account deficit of \$36.5 billion. According to several forecasts, the corresponding figure for 1976 should be about \$29-\$30 billion. To a large extent the 1975 deficit was—and the 1976 deficit will have to be—covered by foreign borrowings. Thus, their debt service payments are a problem of continuing concern.

Despite their financial and trade problems in 1975, the LDC's reduced their commercial imports of U.S. agricultural commodities by only 6.4 percent.